A NEW SPECIES OF TUBEROUS DROSERA FROM WESTERN AUSTRALIA

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ABSTRACT

Drosera prostratoscaposa sp. nov. (section Erythrorhiza), a species distinctive by virtue of its prostrate many flowered inflorescences, from the southern coast of southwestern Australia, is described as new.

KEY WORDS: Drosera, Droseraceae, Australia.

TAXONOMIC TREATMENT

Drosera prostratoscaposa A. Lowrie & S. Carlquist. spec. nov. TYPE: In fine grained black sand on the flats, as well as in a soil mixture of sand, laterite, and a small amount of quartzite rock floaters on the lower scree slopes a short distance away from a small tributary of the Hamersley River, where the tributary crosses Hamersley Drive, ca. 40 km southeast of South Coast Highway, Fitzgerald National Park, Western Australia, Allen Lowrie 96, April 23, 1990. HOLOTYPUS: PERTH; Isotypi: CANB, K, RSA.

Tuber amplans. Caulis parte hypogaea 4 cm longus, squamatus. Folia laminata omnia basilaria rosulato-conferta, ad tempore florendi parva, postea adolescentia obovata, demum 4 cm longa, 1.3 cm lata, petiolata. Scapi 1-4, 4-6 cm longi, ramulosi, ca. 5-25 floram, gignens, tempore florendi erecti, tempore fructendi prostrati. Pedicelli ad anthesim erecti, in fructibus cernui. Flores diurnali, jasmino-fragranti. Sepali basi coalita, ovatolanceolati, integra sed apice serrata vel biloboserrata. 4 mm longa. Petala obovata, truncata, alba, 8 mm long, 4 mm lata, apice crenata. Stamina 2.7 mm longa. Ovaria elliptica, ad anthesim 1.5 mm longa, 1.2 mm lata. Styli 3, in segmata multi trans medium subdigitato-incisa partiti, stigma 1-3 lobata. Capsula 2.3 mm longa.

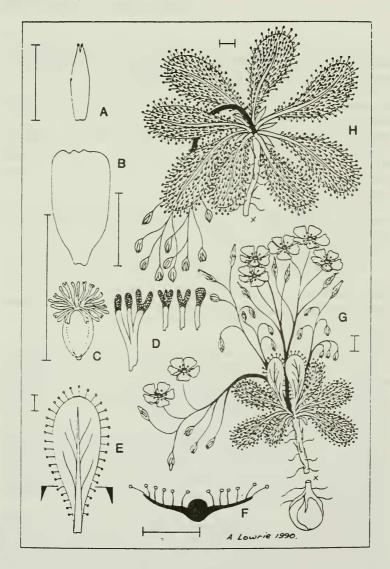


Figure 1. Drosera prostratoscaposa. A, sepal; B, petal; C, ovary and styles; D, style portions and stigmas, enlarged; E, leaf; F, leaf section at point indicated; G, plant in flower; H, plant in fruit. Scale bar for all = 5 mm.

Tuber large in size (for the genus). Underground stem 4 cm long, scaly. Foliage leaves all congested into a basal rosette, small at flowering time but maturing thereafter, mostly 4 cm long, 1.3 cm wide, petiolate. Scapes 1 to 4 per rosette, branched, each scape bearing 5-25 flowers erect at flowering time but prostrate when in fruit. Flowers open during the day (closed at night), jasmine-scented. Sepals united at their bases, ovate-lanceolate, entire but serrate or bilobed serrate at their tips, 4 mm long. Petals obovate, truncate, white, 8 mm long, 4 mm wide, tips crenate. Stamens 2.7 mm long. Ovaries elliptic, 1.5 mm long and 1.2 mm in diameter at anthesis. Styles 3, branched subdigitately above the middle into numerous segments, stigmas 1-3 lobed. Capsule 2.3 mm long.

This new species was discovered by Phil Mann in 1989 and shown to Allen Lowrie in the field in 1990. It belongs in *Drosera* subgenus *Ergaleium* section *Erythrorhiza*. The following species are considered the closest relatives of *D. prostratoscaposa*, but differ from it in the features cited.

Drosera macrophylla produces a basal rosette of sessile leaves approximately half the size of the fully mature leaves before the inflorescence is produced. Two or more scapes usually follow, bearing four to six flowers each. Flowers are white and close at night; anthesis lasts several days, so that several flowers per scape are open at once. The scapes and pedicels are erect both at anthesis and in fruit.

Drosera bulbosa produces a rosette of leaves, juvenile at the time of flowering. Leaves are sessile. All scapes are single flowered. Each flower lasts only one day. After anthesis the scapes lie prostrate on the soil, and are thus spatially separated from subsequently produced scapes. Maturation of leaves occurs only when flowering is completed, and thus most of the leaves cover the prostrate inflorescences.

Drosera prostratoscaposa is distinguished from the above species by producing petiolate leaves and branched, many flowered scapes that become prostrate as flowering proceeds; the pedicels themselves are erect at anthesis but prostrate in fruit. Inflorescences are produced when leaves are quite immature. Anthesis lasts for several days (each flower), and the flowers are distinctively jasmine-scented.

Drosera prostratoscaposa is a common species for at least 3 km northwest along the road from the type collection area. Large swarms of plants of this species abound in this area. This species may extend in other parts of Fitzgerald National Park, but lack of roads and rugged terrain in this area have limited exploration. Associated species could not be determined accurately in the collection area because of recent fires.